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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/066,750

02/06/2002

Hideki Kishi

2002_0210A

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05/13/2004

WENDEROTH, LIND & PONACK, L.L.P.

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WASHINGTON, DC 20006-1021

EXAMINER

LUK, LAWRENCE W

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,750

Applicant(s)

KISHI ET AL.

Examiner

Lawrence W Luk

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,8,11,12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All, b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 7, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by van Phuoc et al. (5,796,239).

As to claim 1, van Phuoc et al. disclose in figure 3, column 3, lines 25-52, a residual capacity correction method for a battery, the method comprising: making a count of one cycle each time an accumulated quantity of a charge capacity of a battery reaches a set capacity; and column 7, lines 34-47, decreasing a learning capacity by a specified cycle degradation capacity per charge of the one cycle.

As to claims 2 and 10, van Phuoc et al. disclose in column 24, lines 10-14, the set capacity is the learning capacity of the battery.

As to claims 5 and 7, van Phuoc et al. disclose in column 2, a residual capacity correction method comprising: specifying a decreasing rate of a learning capacity as a keeping degradation capacity while a keeping temperature and a residual capacity of the battery are used as parameters; and decreasing, as a keeping time passes, in column 2, lines 10-24 and column 3, lines 9-51, the learning capacity by the keeping degradation capacity specified from the keeping temperature and the residual capacity of the battery.

As to claim 9, van Phuoc et al. disclose in column 7, lines 34-47 and column 30, lines 45-60, a count of one cycle is made each time an accumulated quantity of a charge capacity of the battery reaches a set capacity.

Response to Arguments

3. Applicant's arguments filed 3/2/2004 have been fully considered but they are not persuasive. Response to arguments are as follows:

A. In re claim 1, Applicant asserts that van Phuoc et al. does not make 'a count of one cycle each time an accumulated quantity of a charge capacity of a battery reaches a set capacity'. Van Phuoc et al. does teach a count of one cycle each time an accumulated quantity of a charge capacity of a battery reaches a set capacity. Refer to column 3, lines 25-52 and figure 3, unit 142, 144, 146.

B. In re claims 5 and 7, Applicant asserts that van Phuoc et al. does not teach 'decreasing, as keeping time passes, the learning capacity by the keeping degradation capacity specified from the temperature and the residual capacity of the battery (see col. 8, lines 29-39)'. Van Phuoc et al. does teach decreasing, as keeping time passes, the learning capacity by the keeping degradation capacity specified from the temperature and the residual capacity of the battery (refer to column 2, lines 10-24 and column 3, lines 9-51).

Allowable Subject Matter

4. Claims 3, 4, 6, 8, 11 and 12 are objected to as being dependent upon a rejected base claim. The prior art of record fails to teach or reasonably suggest that

As to claims 3, 6, 8 and 11, a residual capacity for a battery is keeping degradation capacity per unit time and the cycle degradation capacity is made 0.003 to 0.15% of the learning capacity of the battery.

As to claims 4 and 12, the battery is a lithium ion secondary battery. Hagiwara et al. shows the battery is a lithium ion secondary battery

Claims 3, 4, 6, 8, 11 and 12 would be allowable if rewritten in independent form including all of the limitations of the base claim.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LWL

May 5, 2004

Lawrence Luk
examiner
5/5/04